

REMARKS

Entry of this Amendment and reconsideration are respectfully requested in view of the amendments made to the claims and for the remarks made herein.

Claims 1-5 are pending and stand rejected.

Claims 1 and 5 are independent claims.

Claims 1, 4 and 5 been amended. Claims 2 and 3 have been cancelled without prejudice.

Claims 1-3 and 5 stand rejected under 35 USC 103(a) as being anticipated by Endecott (WO 02/095574) in view of Givargis (1998, IEEE "Interface Exploration for Reduced Power in Core-Based Systems"). Claim 4 stands rejected under 35 USC 103(a) as being unpatentable over Endecott and Givargis in view of Ricciulli (USPPA 2004/0202190).

With regard to the rejection of claims 1-3 and 5, applicant respectfully disagrees with and explicitly traverses the rejection of the claims. However in order to more clearly recite the invention claimed, applicant has elected to amend the independent claims to recite the element "inspecting bits of said at least one packet to determine bits not required for the issued transaction and updating said not required bits of said at least one inspected packet with corresponding bits of a following ~~another~~ word of the same packet, wherein said unused bits are related to a path over said interconnection." No new matter has been added. Support for the amendment may be found, in part, in claim 2 and in Figure 2B and the description thereof. Although claim 2 has been rejected by the cited references it will be shown that the part of the subject matter recited in claim 2 is not disclosed by the cited references.

Although, applicant has responded to the rejection of the claims, applicant believes that the reference to the combination of Endecott and Givargis is not appropriate, as Endecott, as will be shown, teaches a system wherein bit copying

is performed between packets and is cited for teaching the elements of predetermined number of packet words and predetermined number of word bits and Givargis teaches a system wherein packet word sizes are determined based on hardware and power considerations and bits are copied between words. That is Givargis determines word sized based on a combination of factors and does not consider a predetermined number of words or predetermined number of bits. And using a predetermined number of words and/or bits would be contrary to the teachings of Givargis as would copying bits between words of a packet would be contrary to the teachings of Endecott.

Thus, applicant believes that the cited references have been combined as they recite elements that may be found in the claims and not any suggestion or motivation provided by the references. Thus, the teachings of the instant application have been used as a blueprint to find references that include the claimed elements.

Notwithstanding the argument above, as previously characterized by the applicant, the Office Action has referred to the instructions disclosed by Endecott as being comparable to the packets disclosed in the instant application, by defining the instructions as being divided into bytes and the number of bytes within the instruction representing the depth (size) of the packet. Thus, according to the definition of packets presented by the Office Action the 8-bit instructions shown on page 7 may be considered packets of one word or may be packets of size two with a 4-bit word size.

However, if this definition of the instructions is correct, then Endecott teaches a system wherein unused bits are replaced with bits from a different packet and not from the same packet, as is recited in the claims.

For example, with regard to the example shown on page 4, including three instructions A, B, C, according to the definition of packets presented in the Office Action, each of these instructions may be represented as:

- A A1, A2, A3, A4
- B B1, B2, B3, B4
- C C1, C2, C3, C4.

wherein the first packet (A1, B1, C1) represents the first 8 bits of the respective instruction (i.e., 00111000, 00000000, 00001101, respectively);

the second packet (A2, B2, C2) represents the next 8 bits of the respective instruction, (i.e., 01101000, 10011110, 11100011, respectively),

the third and fourth words of the packets A, B and C, may be similarly deduced.

The example shown on page 4, illustrates that the first five bits of the third packet of the B instruction (B3) are unused and, may then be set to corresponding values of the preceding A instruction (i.e., 5 bits of A3).

However, this replacement of the unused bits of B3 with bits from A3 represents the use of bits of a different packet as the A3 word is not contained within the B packet (B1, B2, B3, B4).

Thus, according to the definition of packets imposed in the Office Action, the unused bits in B3 would have to be replaced by bits from either words B1, B2 or B4, to satisfy the amended claim element "for matching said not required bits in a header of said at least one inspected packet related to a path over said interconnect with corresponding bits from another word of the same packet." (emphasis added).

The example shown on page 7, wherein each instruction is composed of two (2) word packets where each word is 4 bits, also illustrates the replacing of unused bits with bits from a different packet and not from the same packet.

Even if each instruction shown on page 7 is a packet size of 1 (8 bit word), then Endecott illustrates that the bits of one packet are used to replace bits of another packet.

The Office Action refers to Givargis to disclose the element of replacing of unused bits with bits from the same packet. More specifically, the Office Action refers to page 118, first, second and third columns of Givargis for teaching "splitting an item into equal sizes pieces for time multiplexed transmission and sending the equal sized pieces, 8-bits (one word) of an item on the bus lines and keeping unchanged the bus lines that are not carrying information."

In the example provided by Givargis on page 118, 12 bits are to be transmitted in two words of 8 bits over an 8bit bus, wherein the first 8 bits are transmitted in the first word and the next 4 bits are transmitted in the lower 4 bits of the second word. The upper 4 bits of the second word are copied from the first 4 bits of the first word.

Thus, Givargis teaches a system wherein the transmission words in a packet are formed based on the bus size and the words are formulated so that bits in subsequent words are copied from preceding words.

Thus, the combination of Endecott and Givargis creates a device that forms packets based on the bus size (not considering the other factors described by Givargis regarding power consideration) and copying bits from preceding words into unused bits in subsequent words. In addition, the formed packets would then copy bits from one preceding packet to a subsequent packet to replace unused bits in the subsequent packet, as described by Endecott.

Thus, in formulating packet words and multiple packets, the device of Endecott and Givargis copies bits from a preceding word or packet to a subsequent word or packet. However, neither Endecott nor Givargis teaches or suggests that the unused bits may be copied from a following word in the corresponding packet (i.e., inspecting bits of said at least one packet to determine bits not required for the issued transaction and updating said not required bits of said at least one inspected packet with **corresponding bits of a following word of the same packet,...**").

Rather, as shown, each of Endecott and Givargis teaches copying bits from preceding words to fill unused bits in following words. Neither Endecott nor Givargis provides any motivation to reverse the process.

A claimed invention is prima facie obvious when three basic criteria are met. First, there must be some suggestion or motivation, either in the reference themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the teachings therein. Second, there must be a reasonable expectation of success. And, third, the prior art reference or combined references must teach or suggest all the claim limitation. However, the Court in KSR v. Teleflex (citation omitted) has held that the teaching, suggestion and motivation test (TSM) is merely to be used as a helpful hint in determining obviousness and a bright light application of such a test is adverse to those factors for determining obviousness enumerated in the Graham v. John Deere (i.e., the scope and content of the prior art, the level of ordinary skill in the art, the differences between the claimed invention and the prior art and objective indicia of non-obviousness) (citation omitted).

In this case, the combination of the cited references fails to disclose a material element recited in the independent claims and, hence, the combination of the cited references cannot render obvious the subject matter recited in the independent claims and the claims dependent therefrom.

With regard to the rejection of claim 4 as being unpatentable over Endecott in view of Givargis and Ricciulli, applicant respectfully disagrees with and explicitly traverses the rejection of the claims.

Claim 4 depends from claim 1, which has been shown to include subject matter not disclosed by Endecott, and Ricciulli fails to provide any teaching to correct the deficiency found to exist in the combination of Endecott and Ricciulli.

Accordingly, claim 4 is also not rendered unpatentable over the cited

references by virtue of its dependency upon an allowable base claim.

For the amendments made to the claims and for the remarks made, herein, applicant submits that the reason for the rejection of the claims has been overcome and respectfully requests that the rejection be withdrawn.

Applicant denies any statement, position or averment stated in the Office Action that is not specifically addressed by the foregoing. Any rejection and/or points of argument not addressed are moot in view of the presented arguments and no arguments are waived and none of the statements and/or assertions made in the Office Action are conceded.

For the amendments made to the specification and for the remarks made herein, applicant submits that all the objections and rejections have been overcome and that the claims are in a condition for allowance. It is respectfully requested that a Notice of Allowance be issued.

Should the Examiner believe that the disposition of any issues arising from this response may be best resolved by a telephone call, the Examiner is invited to contact applicant's representative at the telephone number listed below.

Respectfully submitted,
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